

REMARKS

Entry of the foregoing, and reconsideration and further examination of the subject application, in view of the amendments above and the remarks below, are respectfully requested.

By the above amendments, the title has been changed to be indicative of the subject matter of the pending claims, as required by the Examiner. Additionally, claims 18-19 have been amended to correct the terminology of the compounds in the mixture. Support for the language in these claims may be found in the description such as in Example 4. No claims are added or deleted in this paper. Thus, upon entry of the foregoing, claims 18-19 will remain pending in the application. Each of these claims is under consideration.

In the Office Action, claims 18-19 were rejected under 35 U.S.C. § 102(b) as being anticipated by JP 59-058026 ("JP '026"). For the following reasons, this rejection should be withdrawn.

JP '026 does not disclose or suggest each feature of the present claims. For example, JP '026 fails to disclose or suggest a mixture of 3,4-dihydroxybutane-1-sulfonate, 1,4-dihydroxybutane-2-sulfonate, and sulfonated oligomers of 3,4-epoxy-1-butene.

To remedy this deficiency, the Office Action alleges that "[d]ue to expected double bond migration," the claimed mixture would result from the reaction of JP '026. However, it is respectfully submitted that the reaction of JP '026 would not produce the claimed mixture because there is no double bond migration in the disclosed reaction. In particular, double bond migration does not occur in the free-

radical addition reaction of JP '026 because the mechanism of the reaction does not give an intermediate that would rearrange to give rise to double bond migration. For a discussion of the mechanism of the reaction, the Examiner's attention is directed to Samuel C. Bright, et al., "Alkane Sulphonate Preparation by the Sulphitation of Long Chain Olefins," J. Appl. Chem. Biotechnol., 1975, pp. 901-912, vol. 25.

Also, the Examiner's attention is directed to Example 4 of U.S. Patent No. 5,698,626. This example shows the addition of bisulfite to 2-butene-1,4-diol. The only product reported is a 1,4-butanediol sulfonate. The patent does not report obtaining either the 3,4-butanediol sulfonate or a mixture of the 1,4- and 3,4-isomers.

For the above reasons, JP '026 fails to disclose or suggest each feature of the present claims. As a result, there is no *prima facie* case of anticipation, and the rejection should be withdrawn.

From the foregoing, further and favorable action in the form of a Notice of Allowance is believed to be next in order, and such action is earnestly solicited.

If the Examiner has any questions concerning this Reply, or the application in general, the Examiner is invited to telephone the undersigned at the number listed below.

Respectfully submitted,

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